

	Pre-transplant	Post-transplant	p value
Body weight (kg)	57.74 ± 8.00	54.43 ± 7.62	0.00
S. hemoglobin (g/dL)	10.44 ± 1.32	12.04 ± 1.87	0.03
S. BUN (mg/dL)	46.55 ± 22.52	18.13 ± 5.88	0.00
S. creatinine (mg/dL)	8.06 ± 3.39	1.15 ± 0.57	0.00
S. calcium (mg/dL)	8.70 ± 1.10	9.12 ± 0.72	0.04
S. phosphate (mg/dL)	5.20 ± 2.05	2.50 ± 1.05	0.00
S. albumin (g/dL)	3.59 ± 0.52	4.06 ± 0.33	0.00
S. globulin (g/dL)	2.83 ± 0.52	2.49 ± 0.35	0.00
HDL (mg/dL)	47.80 ± 12.36	63.45 ± 16.97	0.00
Total bilirubin (mg/dL)	0.45 ± 0.13	0.78 ± 0.39	0.00
AST (IU/L)	14.20 ± 6.30	20.90 ± 8.78	0.01
ALT (IU/L)	12.75 ± 5.63	22.10 ± 12.53	0.01

By the end of the first year, serum hemoglobin, calcium, albumin, HDL, bilirubin, AST, ALT were increased statistically. But serum phosphate, globulin were decreased statistically. In conclusion, successful ABO incompatible living donor kidney transplantation would restore a normal nutritional status even though the patients were performed plasmapheresis during the pre-transplant period.

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183 ORAL SUPPLEMENTATION OF KETO/AMINO ACID DID NOT IMPROVE NUTRITIONAL STATUS IN MALNOURISHED HEMODIALYSIS PATIENTS

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Protein-calorie malnutrition is common in hemodialysis (HD) patients and correlated with morbidity and mortality of these patients. This prospective study evaluated the nutritional impact of oral keto/amino acid (Ketosteril®) supplementation in malnourished HD patients.

Non-diabetic 39 HD patients with evidence of malnutrition (< 4.0 g/dL for last 3 consecutive monthly examinations) were included. Patients were followed for a 3 month baseline period during which they received conventional nutrition counseling. This was followed by oral supplement of Ketosteril® (9.6 g/day) over a period of 6 months. After Ketosteril® supplementation a 3 month observation period was followed.

The patients were 64.3 ± 13.2 (Mean ± SD) years old and female predominant (n=23, 59%). The nutritional parameters including dry weight (57.9 ± 1.0, 58.0 ± 1.9, 58.1 ± 0.9 kg), body mass index (23.6 ± 0.6, 22.9 ± 0.4, 23.0 ± 0.5 kg/m²), serum albumin (3.7 ± 0.1, 3.7 ± 0.0, 3.7 ± 0.1 g/dL), serum creatinine (9.6 ± 0.7, 9.5 ± 0.4, 9.7 ± 0.5 mg/dL), and mid-arm circumference (27.3 ± 0.8, 27.2 ± 0.8, 27.2 ± 1.0 cm) were not changed during baseline, supplement and observation period.

In conclusion, oral nutritional supplement with Ketosteril® did not improve nutritional status in malnourished HD patients.

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184 RELATIONSHIP BETWEEN BLOOD PRESSURE AND BODY COMPOSITION IN CHRONIC KIDNEY DISEASE PATIENTS: DRY MASS INDEX AND RATIO OF TOTAL BODY WATER TO ESTIMATE TOTAL BODY WATER

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Obesity and hypervolemic status are mainly one of causes of hypertension in chronic kidney disease (CKD) patients. However, it is difficult to assess these factors because changes in body weight (BW) in CKD patients are affected not only by muscle and fat, but also by fluid status. The objective of this study is to assess the relationship between

blood pressure (BP) and body composition using dry mass index (DMI), which subtracts total body water (TBW_{BIA}) from BW, and a ratio of TBW_{BIA} to estimated TBW_{watson} by anthropometric formula (Watson). In 40 randomly selected CKD patients, body composition and BP measured by bioelectrical impedance analysis (BIA) and by 24 hour ambulatory BP monitoring, respectively. Based on DMI and TBW_{BIA}/TBW_{watson} ratio, participants were categorized into 3 of obese, 15 of overweight, 21 of optimal weight, and one of underweight, or into 13 with hypovolemia, 19 with euvolemia, and 8 hypervolemia.

	DMI		TBW_{BIA}/TBW_{watson}	
	r	p	r	p
Daytime sBP	-0.005	0.998	0.429	0.006
Night-time sBP	-0.086	0.588	0.534	< 0.001
Non-dipping status	0.095	0.558	0.413	< 0.001

Ambulatory BP was associated with the ratio of TBW_{BIA} to TBW_{watson} . In conclusion, the ratio of TBW_{BIA} to TBW_{watson} is a reliable marker of fluid status, which is of practical use to assess cause of hypertension in CKD patients.

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185 TASTE DISORDER AS A COMMON CAUSE OF ENHANCED SALT INTAKE IN DIALYSIS PATIENTS

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Salt intake is a key, but hard-to achieve target of nutrition guidance in chronic hemodialysis (HD) patients. In this study, we examined the influence of hypogeusia on oral salt intake in 34 HD patients (mean age: 59 years old) with dialysis vintage over 15 years. Their salt intake was calculated by Kimura's formula (Int J Artif Organs, 1988) with pre- and post HD serum sodium concentrations and body weight gain between dialysis sessions. Hypogeusia was evaluated by gustatory tests by filter-paper disc.

Average estimated salt intake was 9.5 ± 2.7 g/day (160% of recommended salt intake by Japanese CKD guideline). HD patients showed lower sensitivity for salt than normal populations. Scores for salty taste were lower in patients taking less than 10 g of salt (Group L) than those taking more than 10 g (Group H). There was no difference in BMI or protein intake between these two groups. More prevalent use of spices in cooking was confirmed by dietary survey in Group L than Group H.

In conclusion, enhanced salt intake in HD patients is partly due to taste disorder (less sensitive to salty taste). It may be possible to decrease enhanced salt intake by appropriate use of spices.

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186 KNOWLEDGE IN RENAL NUTRITION OF MEDICAL DOCTORS AND NURSING STAFF

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Diet prescription for hospitalized renal patients should be individualized and based on their nutritional status and biochemical profiles. However the practice of ordering a 'renal diet' which consists of low protein, low salt, low potassium and low phosphate for all renal patients is common in the acute hospital setting. A total of 49 medical doctors were interviewed on their diet prescription practices for renal patients. In addition, a questionnaire was distributed to 488 nurses to assess their knowledge in renal nutrition. 68% of